distinguendus Fairmaire 1893, 1903. (sordidus Marshal 1802) = emarginatus.stangli Schwarz & Barber 1918..... Luzon (sulcatus Gory in Guerin-Meneville 1835) = senegalensis. (tesselatus Ziegler 1844, Lacordaire 1854..... Eastern U. S. (genotype of Sperchopsis LeConte 1861 transferred to Hydrobius, Horn 1873, 1890).

(vertucosus Marsham 1802) = emarginatus.

A NEW COLEOPHORA INJURIOUS TO APPLE IN CALIFORNIA.¹

(Lepidoptera; Coleophoridae.)

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Coleophora volckei n. sp.

Palpi iridescent ochreous on outer sides, silver white around base of second joint and on entire inner side, long slender; third joint two-thirds as long as second; a rather prominent tuft on joint two. Antennae silver white below, white above faintly banded with golden ochreous; basal joint tufted above with ochreous scales. Tongue white at base shading to ochreous. Face, head, and thorax iridescent ochreous. Forewings uniform iridescent ochreous. Hind wings a triffe more gravish; cilia of fore and hind wings concolorous, gravish ochreous, somewhat more yellowish at base. Legs silver white streaked with blackish ochreous on the outsides. Abdomen white below, ochreous above; anal tuft ochreous with a few white scales interspersed. Alar expanse 15 mm.

Habitat.—Watsonville, Cal.

Food Plant.—Apple.° Type.—Cat. No. 21464 U. S. Nat. Museum.

Described from five moths reared June 7-11, 1916, at the Bureau of Entomology from larvae collected by Mr. W. D. Volcke, who states that the species is injurious to apple in California, mining the leaves and occasionally feeding upon the fruit itself. Superficially the species resembles the eastern apple feeder, C. fletcherella Fern., but is readily distinguished by its larger size, the white markings on palpi, legs, and abdomen and its very different larval case.

¹ Due to the unexpected delay in the publication of this article this species was described in an article on its biology by W. D. Volcke, Mo. Bull, Calif. Comm. Hort., vol. 7, 1917, p. 463-467.